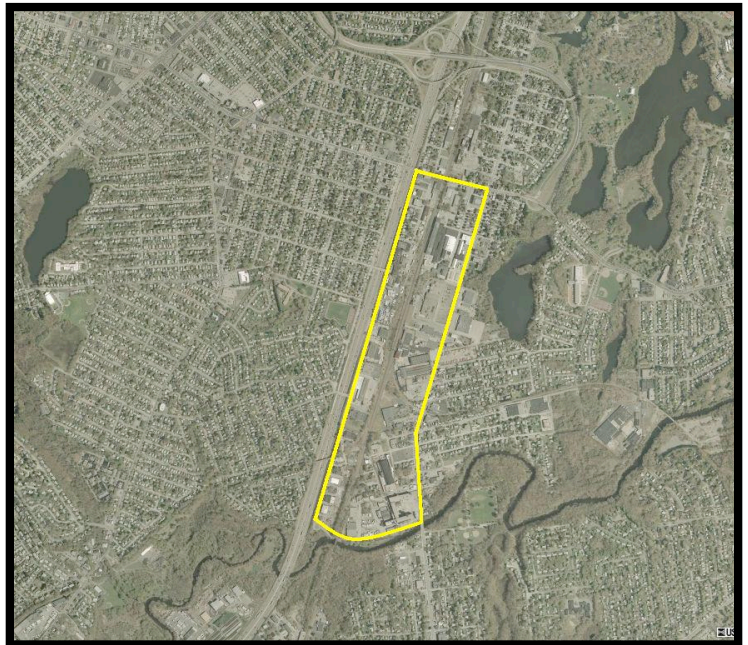
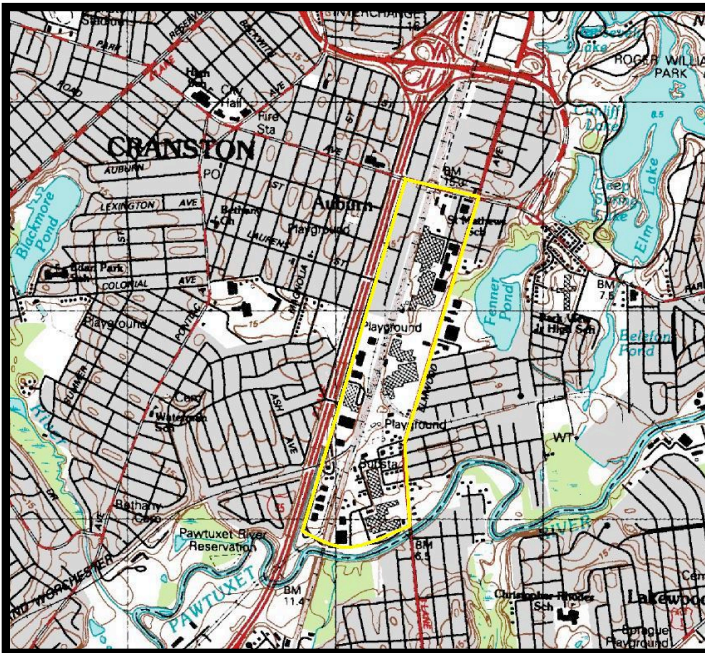


## INTRODUCTION

The Cranston Transit Station has emerged as one of the major concepts coming out of several public workshops in the development of an updated City Comprehensive Plan. The location chosen to study this topic is an under-utilized area about halfway between the Providence Station and the proposed commuter rail station at TF Green Airport in Warwick. This location is bounded by Park Ave to the north, Elmwood Ave to the east, Wellington Ave to the south and west and the Amtrak Northeast Corridor (NEC) bisecting the project area.

Currently the chosen location contains over 125 businesses as well as some residences on 155 acres of land. The area is completely developed and urban, with no open space and previously laid infrastructure. Given these qualities along with the contiguous urban development all around the site, this location is prime for intensive redevelopment with a focus on a transit stop. This redevelopment would potentially be an economic stimulant not only to the actual site, but to surrounding neighborhoods as well. The city, in cooperation with the Rhode Island Department of Transportation, hopes that this area can become one of Rhode Island's first Transit-Oriented Development sites.



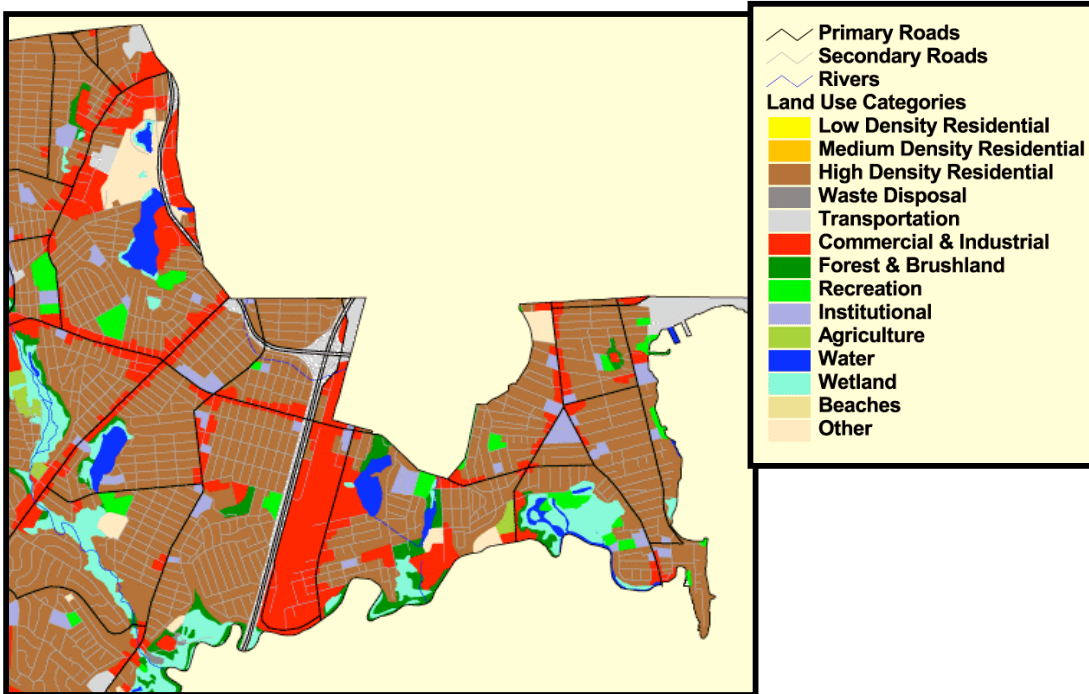
*Cranston Transit Station Site Map/Aerial*

This report will analyze the existing conditions of this area and therefore lay the necessary framework for a master plan to redevelop the area. Sections in this analysis will include land use, population statistics, railroad lines, crossings and access, existing public transportation, trip generators and an environmental evaluation of the site.

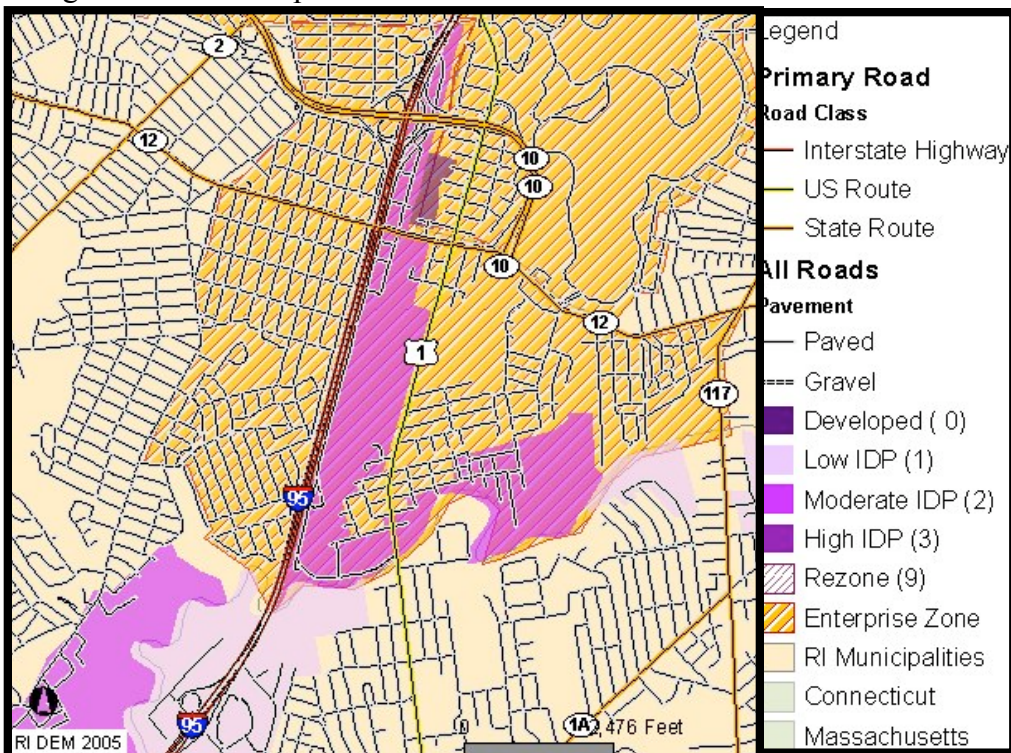


## I. LAND USE

The project area at the proposed transit station site is currently used for commercial and industrial purposes (see map below), with some residential zoning and institutional use in the northwest corner of the parcel. It is anticipated that the area would be rezoned for transit-oriented development with mixed uses if the station were to advance into the planning stage.



Moderate Industrial Development Potential exists within the site, and the entire site is designated as an enterprise zone.

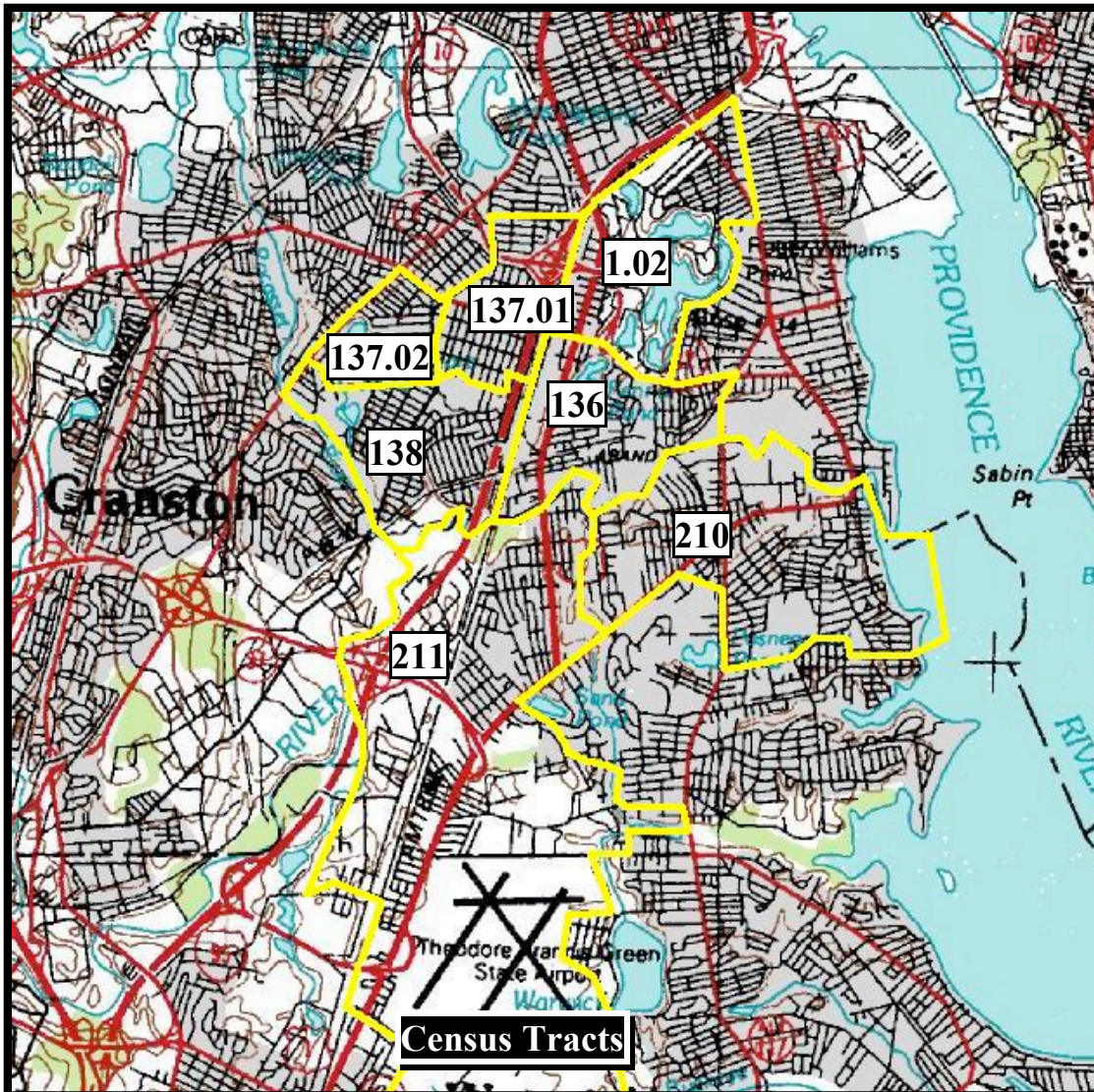




## II. POPULATION

The population of the City of Cranston according to the 2000 census was 79,269. The 2004 census population estimate for the city is 81,986, representing an increase of 3.4%. In the year 2000, Cranston's per capita income was \$21,978 compared to the State of Rhode Island's per capita income of \$21,688.

The proposed site is located in Providence County census tracts 136, 137.01 and 138. Other census tracts that a transit station would potentially draw population from include Providence County census tracts 137.02 and 1.02 and Kent County census tracts 210 and 211.



The population in these census tracts is either directly adjacent to 136, 137.01 and 138 or north of the proposed TF Green Airport station in Warwick and therefore would be more likely to utilize a station in Cranston. These census tracts have the following statistics:



<u>Census Tract (Providence or Kent Counties)</u>	<u>Total Population</u>	<u>Population 16 years and over</u>	<u>% Individuals below poverty level</u>	<u>% Multi-unit dwellings</u>	<u>Housing Units</u>	<u>% Public Transportation or walk to work</u>
<u>PC 1.02</u>	5,016	3,619	18.6	57.6	1,846	11.0
<u>PC 136</u>	2,942	2,269	7.8	35.1	1,197	3.1
<u>PC 137.01</u>	4,087	3,173	8.1	46.8	1,759	5.6
<u>PC 137.02</u>	2,862	2,249	5.4	34.8	1,235	3.0
<u>PC 138</u>	5,036	3,999	5.5	32.7	2,186	2.0
<u>KC 210</u>	8,001	6,467	4.8	21.7	3,356	3.5
<u>KC 211</u>	5,383	4,346	7.3	29.5	2,229	5.1

### **III. RAILROAD LINES**

Currently four different railroad lines exist at or near the proposed site: The Northeast Corridor, the Pontiac Secondary, the Warwick Industrial and the Harbor Junction Industrial.

#### **Northeast Corridor**

The Northeast Corridor (NEC) line is owned and operated on by Amtrak. This double track line bisects the site east and west and has overhead catenary wires and stanchions. This line is used for Amtrak's intercity train and high-speed rail service from Boston to Washington D.C.

#### **Pontiac Secondary**

The Pontiac Secondary line is owned by RIDOT and is abandoned. This single track line connects to the western side of the NEC line in the southwest section of the site. It is approximately five miles long and was formerly used for freight operations by the Providence & Worcester Railroad Company (P&W). The condition of the rails shows extensive wear and drainage problems on this site.

#### **Warwick Industrial**

The Warwick Industrial line is owned by P&W and is inactive although not abandoned. This line connects to the eastern side of the NEC just north of the Pontiac Secondary and runs eastward and then southward into the City of Warwick. Conditions on this line are FRA Class I.



## Harbor Junction

The Harbor Junction line is owned by the City of Providence and is an active freight rail line utilized by P&W. Overall it is in poor condition with extensive wear, although its southern branch is FRA Class I. The line runs from the eastern side of the NEC north of Park Avenue northeastward along Interstate 95 and then splits into a northern and southern branch. Its northern branch runs into and along Route 1A (Allens Avenue) in the City of Providence, while its southern branch runs into the Fields Point area of Providence. Its main stretch is approximately three miles in length (from the NEC north onto Allens Avenue).



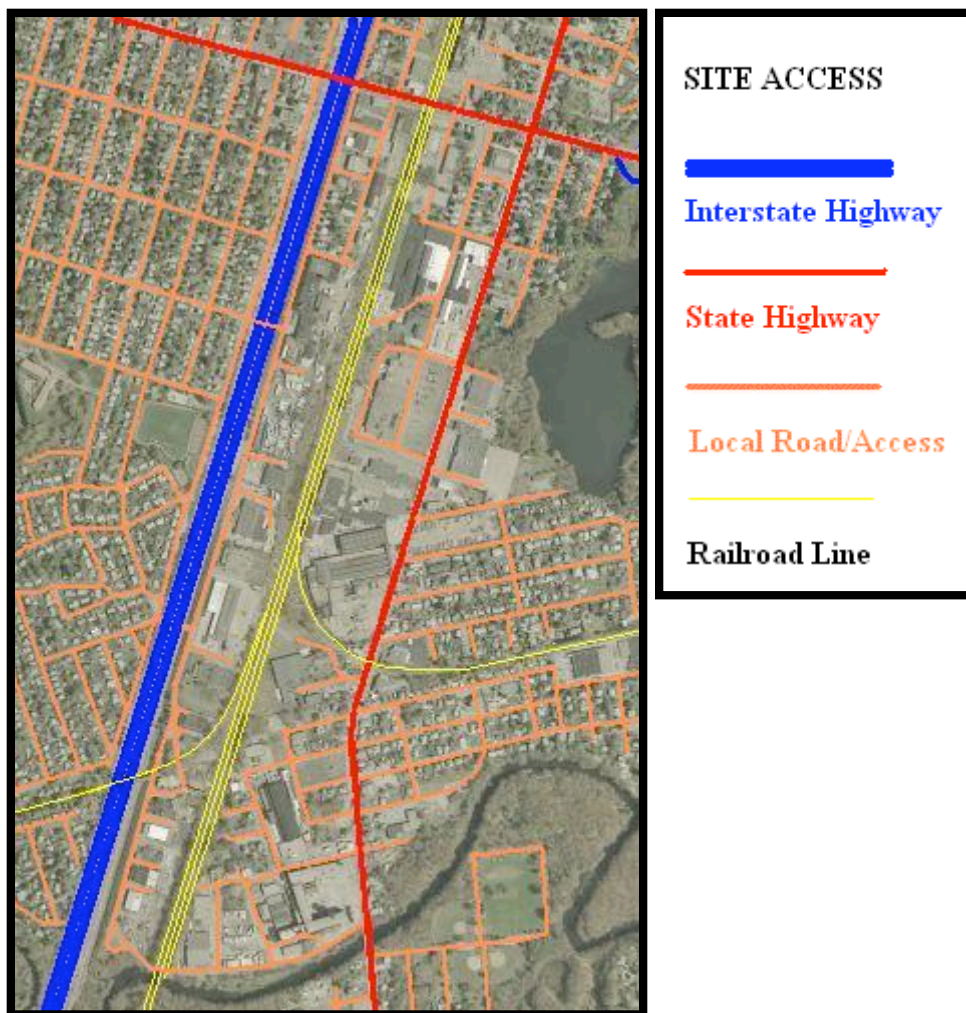
In addition, the Freight Rail Improvement Project (FRIP) is currently under construction by RIDOT at the site. This line will run along the western side of the NEC and will utilize the Pontiac Secondary trackbed within the NEC.



### III. CROSSINGS AND ACCESS

All crossings along the Amtrak NEC are either above-grade or below-grade, as Amtrak eliminated all of its at-grade crossings as part of the Northeast Corridor Grade Crossing Elimination Program. Currently there are two crossings of the Northeast Corridor at the proposed site. The first is at Park Avenue where the NEC crosses below-grade. The second is at Wellington Avenue where the NEC crosses above-grade.

In addition to NEC crossings, two other rail crossings exist at the site. One is on the Pontiac Secondary Railroad line where it branches off of the NEC on its western side and crosses both Wellington Avenue and Interstate 95 above-grade. The second is the Warwick Industrial Track where it branches off the eastern side of the Northeast Corridor to cross over Elmwood Avenue at-grade.



Access to the site is available primarily via Wellington Avenue, which runs along the western and southern edges of the site. Access from Elmwood Avenue and Park Avenue is also available as they form the northern and eastern boundaries of the site. Additionally, Station Street, Frances Avenue, Fenner Street and Cross Street all are



located within the proposed station site at its northern end. First, Second, Third and Fourth Avenues all provide access into the site from Elmwood Avenue at the southern end of the site.

Numerous access points into businesses also exist in the site, primarily off Elmwood Avenue and Wellington Avenue. Direct access to the NEC can be found off of Wellington Avenue via a dirt path just south of the crossing of the Pontiac Secondary line.

#### **IV. PUBLIC TRANSPORTATION**

The proposed site is currently served by the RI Public Transit Authority's (RIPTA) #20 bus (Elmwood/Airport/Auburn). This bus has two beginning inbound routes, one from Auburn which runs along Wellington Avenue to Elmwood Avenue and another that begins at TF Green Airport and runs north on Elmwood Avenue to Providence. Both routes directly serve the proposed station site, one along the western edge and both along the eastern edge.

Frequency of service on the #20 bus can be summarized by the following chart (time in minutes):

	<b>Rush Hour</b>	<b>Midday</b>	<b>Nighttime</b>	<b>Saturday</b>	<b>Sunday</b>
#20 along Elmwood Avenue	22	22	40	40	37
#20 along Wellington Avenue and to TF Green Airport	45	45	75	80	40

Higher frequency of service along Elmwood Ave north of the Warwick city limits results from both the Auburn branch and the Airport branch converging onto Elmwood Ave at that point.

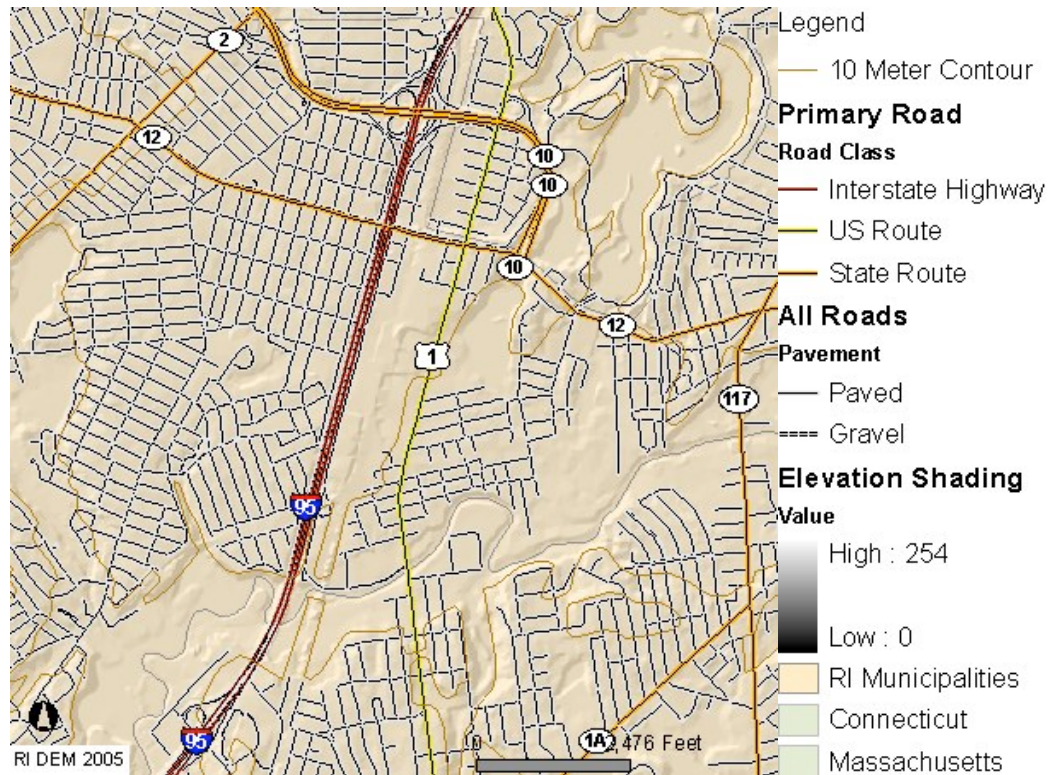
#### **V. TRIP GENERATORS**

Various trip generators at and around the proposed site make it a statewide destination for employment, retail and recreation. Over 125 businesses are located within the site boundaries itself as well as a large supermarket-anchored shopping plaza. Additionally, Roger Williams Park and Zoo are located just to the northeast of the site and would be within walking distance of a potential light rail or busway stop on the adjacent Harbor Junction line.

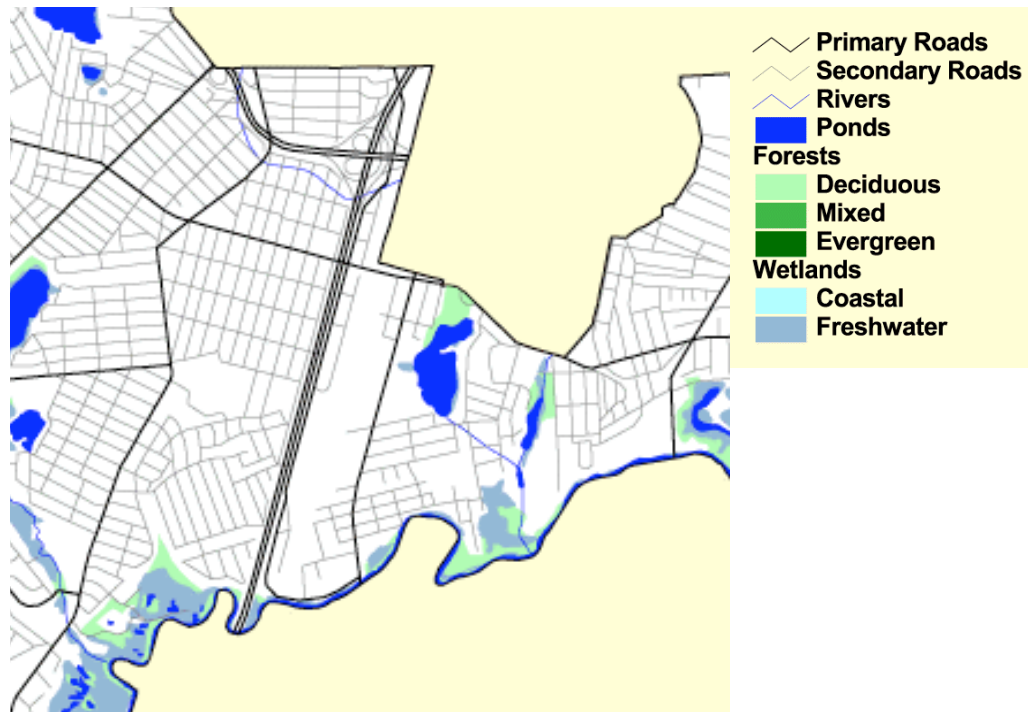
## VI. ENVIRONMENTAL EVALUATION

The following maps depict environmental conditions in and around the proposed site:

### A. Topography

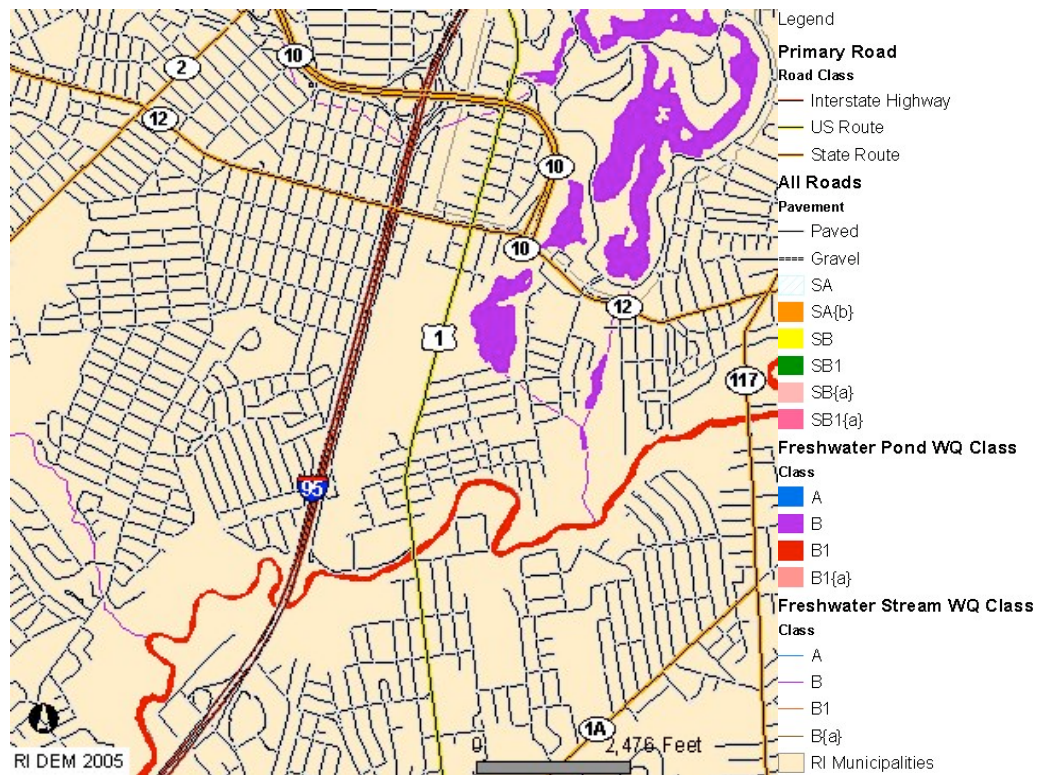


### B. Wetlands

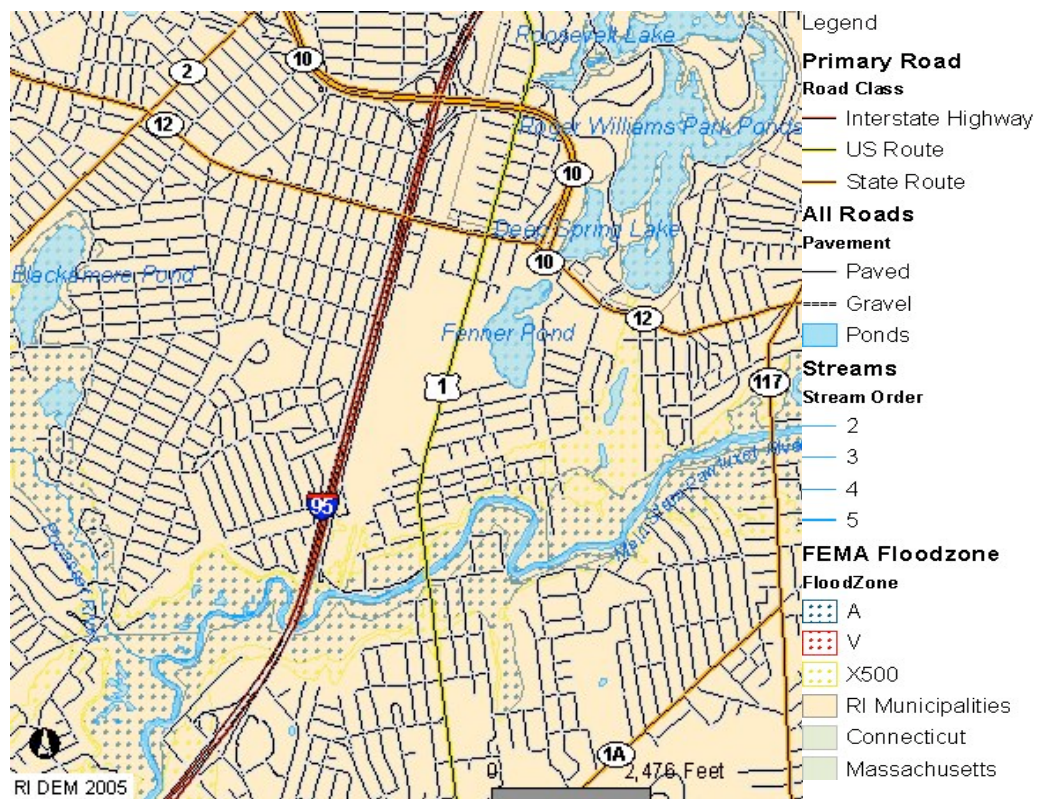




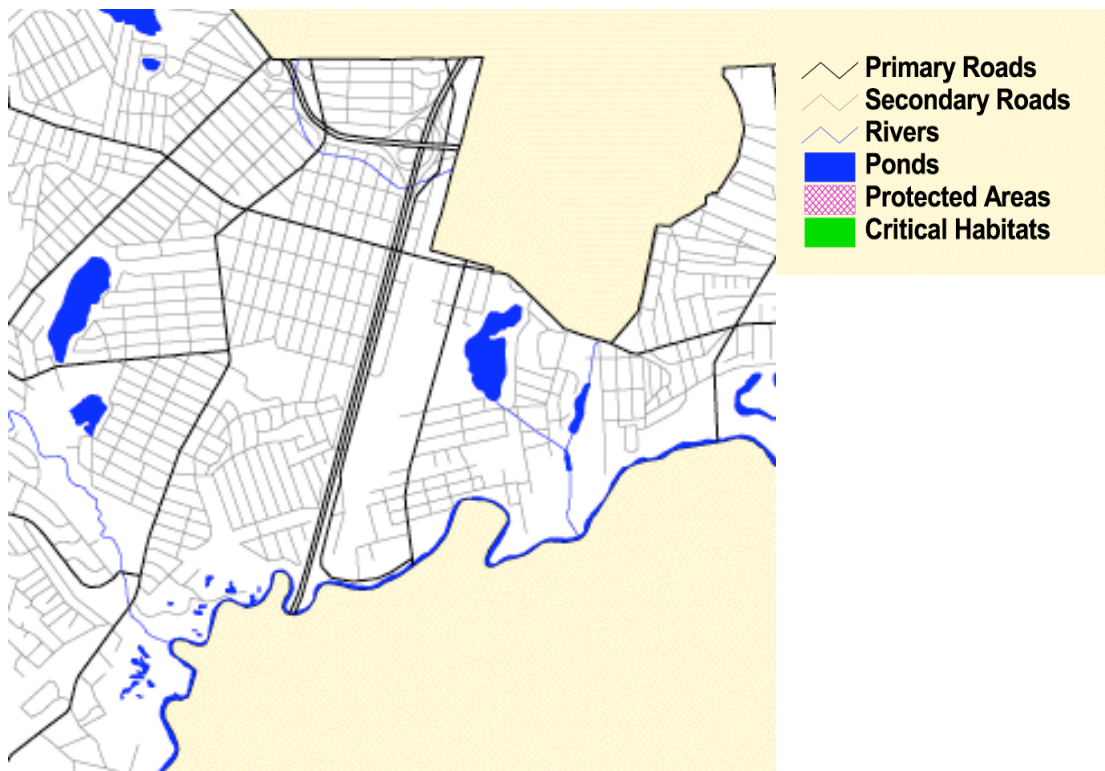
### C. Water Quality



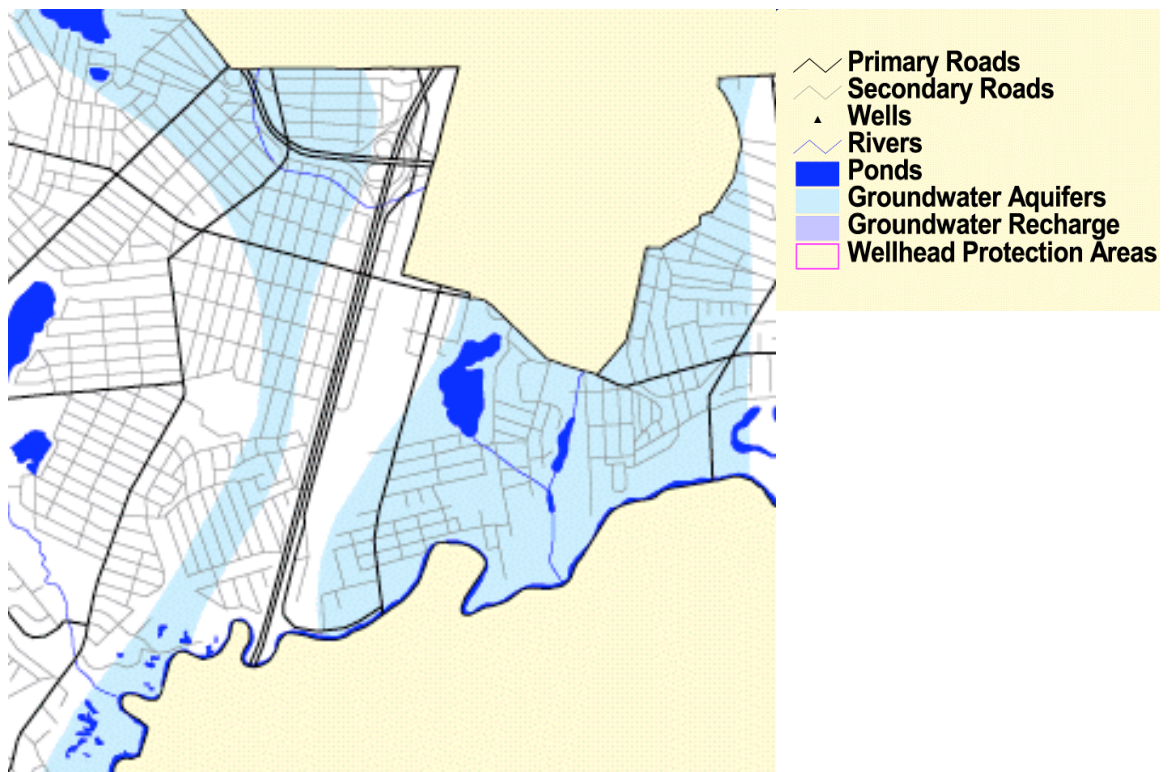
### D. Flood Plains



### E. Biodiversity Impacts

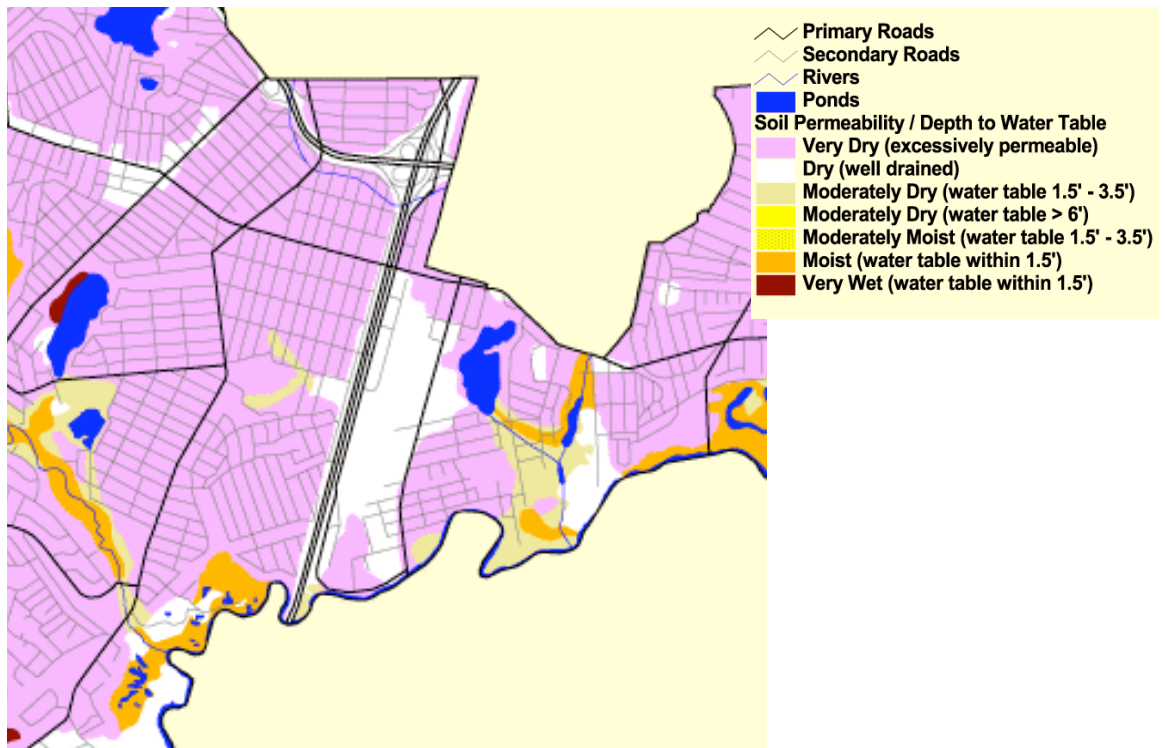


### F. Groundwater

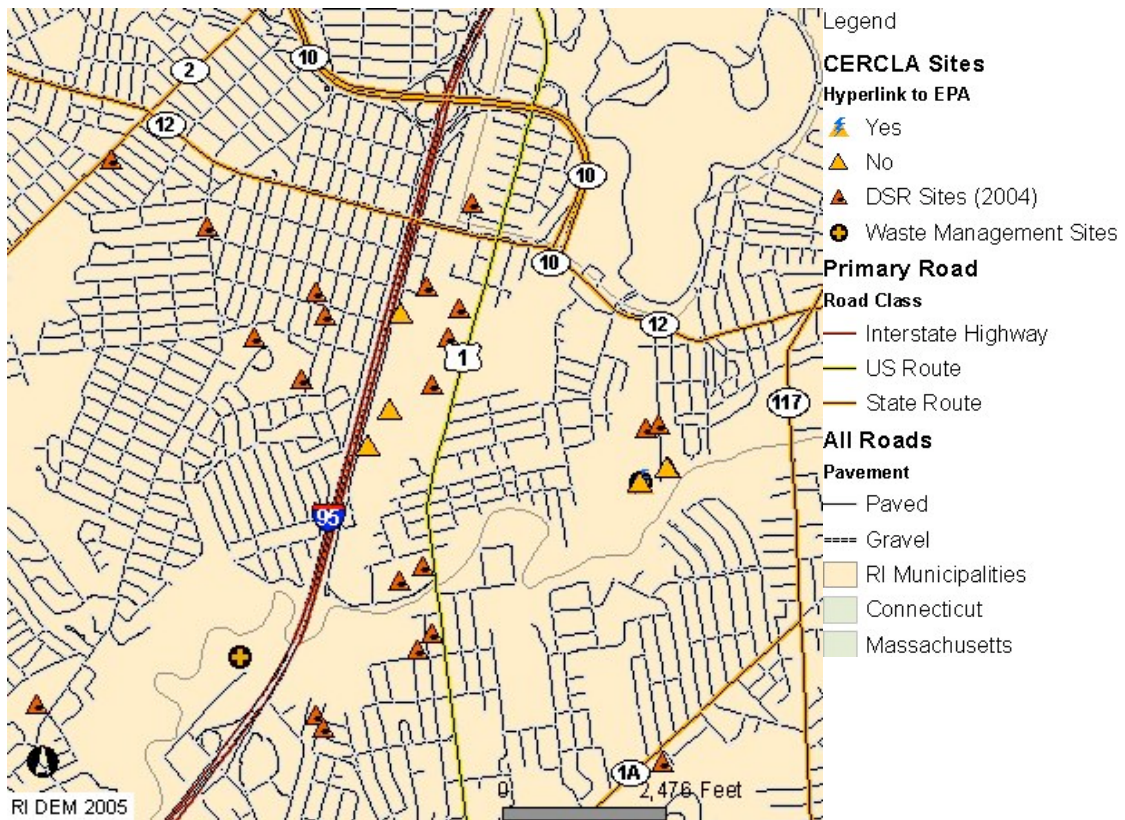




## G. Soils

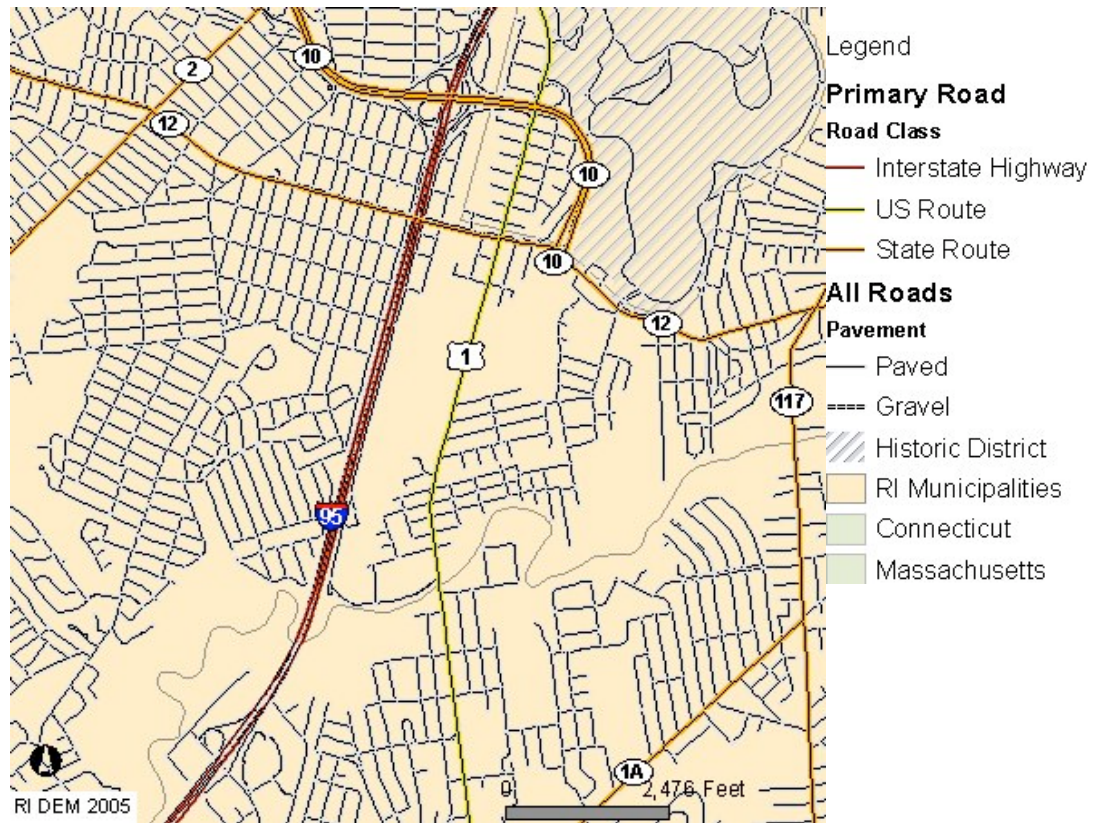


## H. Hazardous Materials

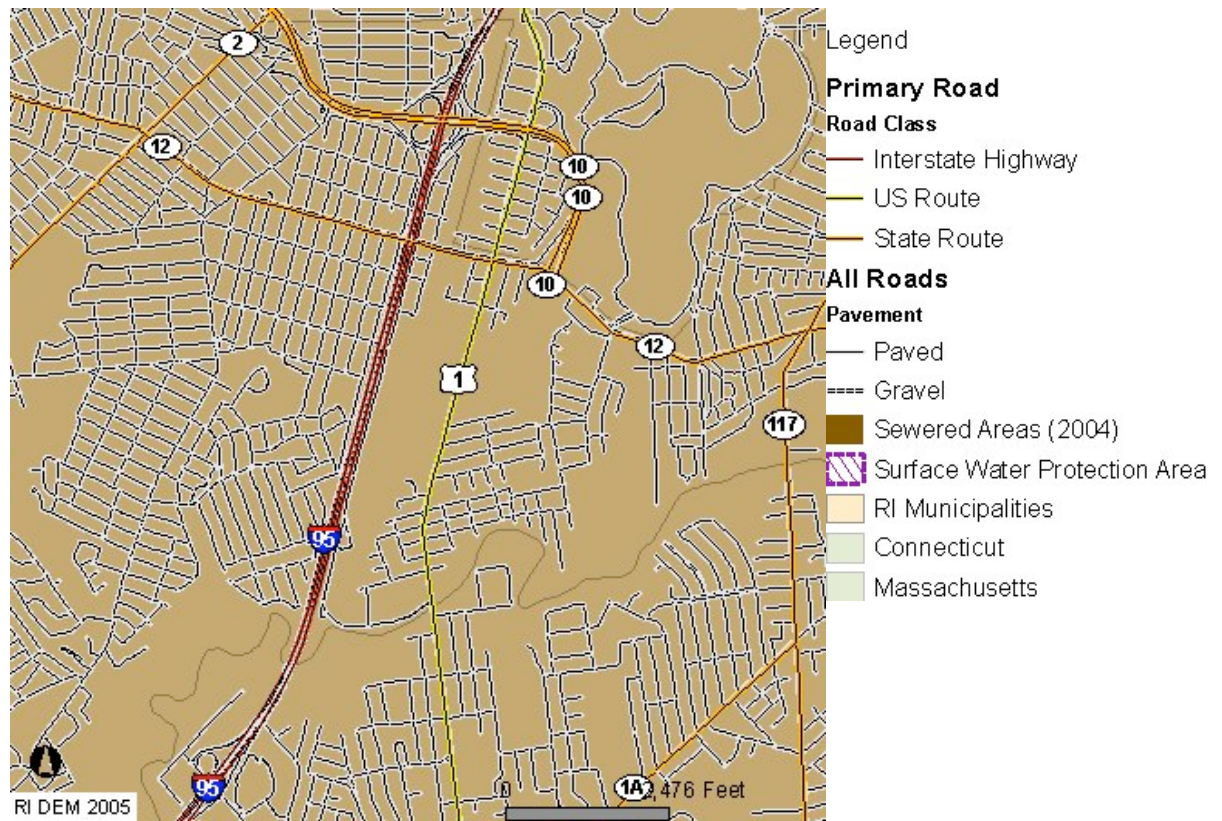




## I. Cultural Resources

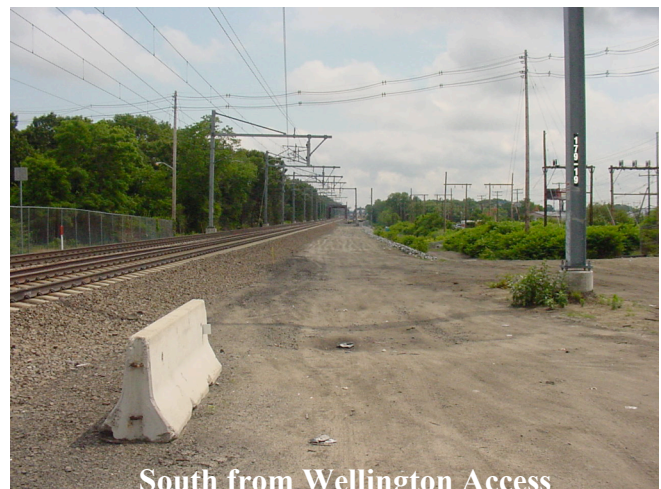


## J. Sewered Areas

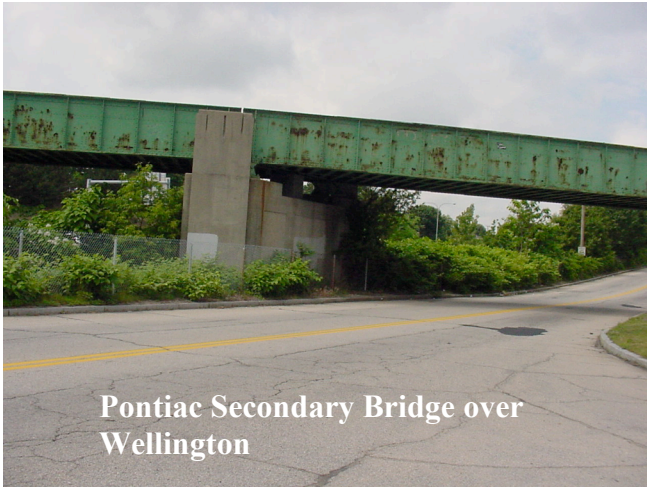




## VII. SITE PHOTOS







Pontiac Secondary Bridge over Wellington



South on Wellington Ave



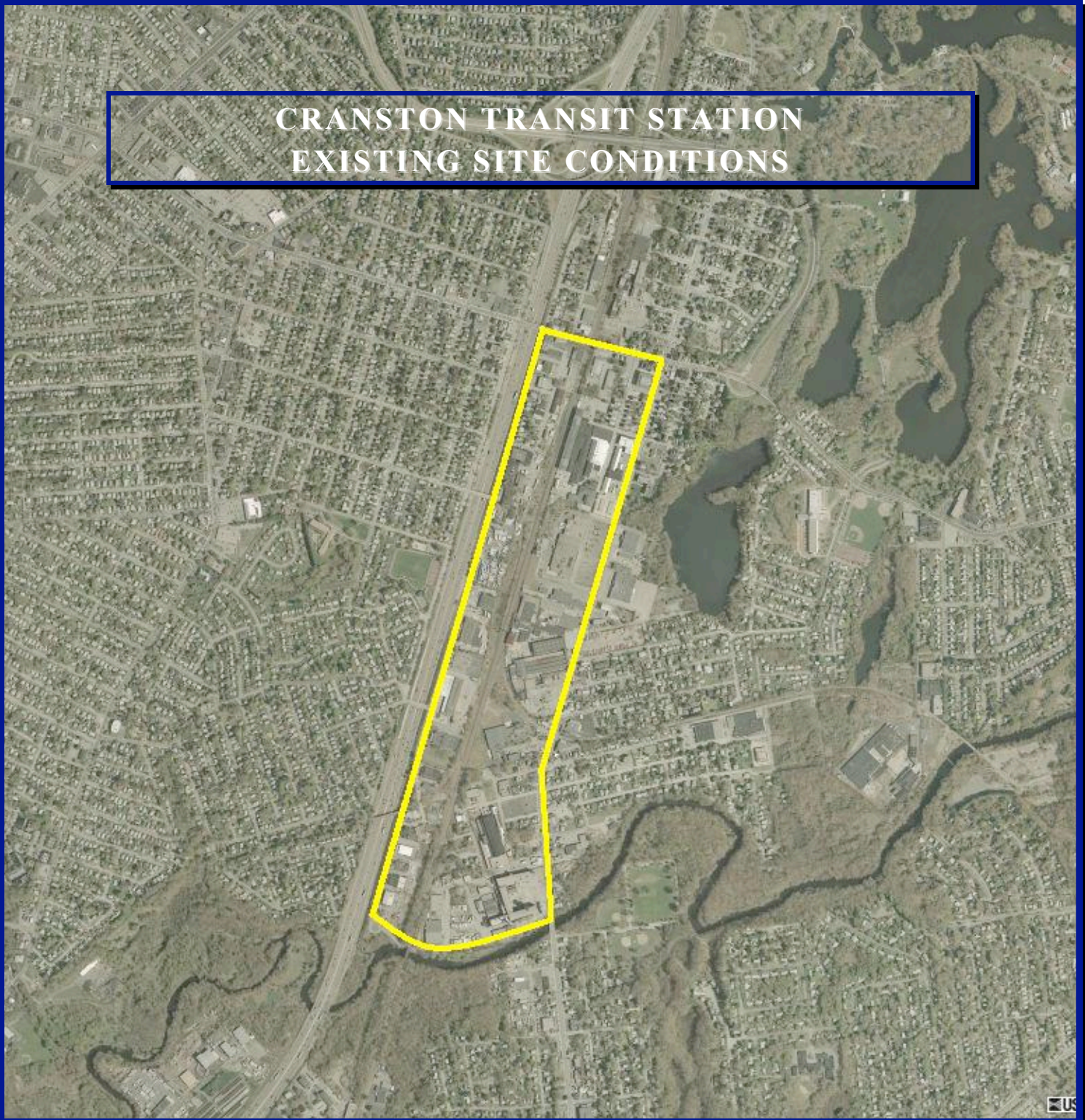
South from Fenner St to PriceRite



South from Park East of NEC



## CRANSTON TRANSIT STATION EXISTING SITE CONDITIONS



**Submitted to:** RI Department of Transportation  
**Submitted by:** Adam Recchia, Student Intern  
August, 2005



## REFERENCES

- Microsoft Corporation. Terraserver-USA: Cranston Urban Areas. 2002  
Retrieved from: <http://www.terraserver.microsoft.com/>
- Rhode Island Department of Environmental Management. Environmental Resources Map. 2005. Retrieved from: <http://www.dem.ri.gov/maps/index.htm>
- Rhode Island Department of Transportation. RI Rail Corridor Feasibility Study. November, 1994.
- Rhode Island Department of Administration, Division of Planning. RI Freight Rail Plan: State Guide Element 661. June 1993.
- RIGIS. Cranston Critical Resource Atlas. Retrieved from:  
<http://www.edc.uri.edu/riatlas/Town/Cranston.html>
- United States Census Bureau. American Fact-Finder. 2000. Retrieved from:  
[http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=DEC&\\_lang=en](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=DEC&_lang=en)